

AMENDMENTS TO THE CLAIMS:

1. (Currently amended) In a centripetally-motivated fluid micromanipulation apparatus, a microsystem platform comprising
- a) a rotatable platform, comprising a substrate having a first flat, planar surface and a second flat, planar surface opposite thereto, each surface comprising a center about which the platform is rotated, wherein the first surface comprises in combination
 - b) ~~an entry port comprising a depression in the first surface having a volumetric capacity of about 1 to about 150 μ L, that is fluidly connected with~~
 - ~~c) a first microchannel which defines an internal dimension of about 0.02mm to about 1mm, and wherein the microchannel extends radially from the center of the platform and defines a first end proximally arrayed towards the center of the platform and a second end distally arrayed from the center of the platform, wherein the first microchannel is fluidly connected with~~
 - d) a first fluid chamber having a volumetric capacity of about 1 to about 150 μ L a depth from the first surface of the platform equal to or greater than the first ~~microchannel and positioned radially more distant from the center of the platform than the entry port,~~

~~wherein rotation of the platform at a first rotational speed motivates displacement of the fluid in the entry port through the first microchannel and into the first fluid chamber; and wherein the platform further comprises~~

- c[e) a second fluid chamber containing a volume of a displacement fluid, the second fluid chamber being fluidly connected with
- d[f) a ~~second~~ first microchannel, wherein the ~~second~~ first microchannel extends radially from the center of the platform and defines a first end proximally arrayed towards the center of the platform and a second end distally arrayed from the center of the platform, wherein the ~~second~~ first microchannel is fluidly connected with the second fluid chamber at the first end of the microchannel and wherein the ~~second~~ first microchannel is fluidly connected with the first fluid chamber at the

~~second end of the microchannel, wherein rotation of the platform at the first rotation speed does not motivate flow of the displacement fluid through the second microchannel; and wherein the platform further comprises~~

e[g]) a third fluid chamber that is fluidly connected with

f[h]) a ~~third~~ second microchannel, wherein the ~~third~~ second microchannel extends radially from the center of the platform and defines a first end proximally arrayed towards the center of the platform and a second end distally arrayed from the center of the platform, wherein the ~~third~~ second microchannel is fluidly connected with the ~~third~~ second fluid chamber at the first end of the microchannel and wherein the ~~third~~ second microchannel is fluidly connected with the ~~second~~ first fluid chamber at the second end of the microchannel, ~~wherein rotation of the platform at the first rotation speed does not motivate flow of the displacement fluid through the third microchannel;~~

wherein rotation of the platform at a ~~second~~ rotational speed motivates flow of the displacement fluid from the second fluid chamber, through the first ~~second~~ microchannel and into the first fluid chamber, wherein flow of the displacement fluid into the first fluid chamber forces the fluid in the first fluid chamber through the second ~~third~~ microchannel and into the third fluid chamber; and wherein ~~each~~ of the microchannels and the fluid chambers also comprise air displacement channels whereby air displaced by fluid movement is vented to the first surface of the platform.

2. (Currently amended) A method for moving a fluid in a microsystem platform according to Claim 1, the method comprising the steps of

- a) applying an amount of a fluid sample comprising a volume of about 1 to about 100 μ L to the first fluid chamber ~~entry port~~ of the rotatable microsystem platform;
- b) rotating the platform at a ~~first~~ rotation speed for a time sufficient to ~~displace the fluid in the entry port into the first fluid chamber; and~~
- ~~c) rotating the platform at a second rotation speed that is greater than the first rotational speed that motivate[s] the displacement fluid through the displacement fluid from the second fluid chamber, through the second microchannel and into~~

the first fluid chamber, wherein flow of the displacement fluid into the first fluid chamber forces the fluid in the first fluid chamber through the second ~~third~~ microchannel and into the third fluid chamber.

3-6. (Cancelled)

7. (New) The method of claim 2, wherein the fluid sample is a biological sample.